

CLAIMS

1. A convection furnace for a tempered glass sheet (1), into which furnace the glass
5 sheet arrives along a hauling track, as on turning rolls (3), and the furnace has also
heating resistances (5) against glass sheet (1) for heating the blast air, a blast apparatus
and blast channelling (4),(2) for blasting said air against the glass sheet, **characterized**
in that the blast channelling comprises elongated channels (2) in the glass sheet (1)
direction or fitted at right angles, inside of which there is at least a part of each blast
10 heating resistance (5) and each channel (2) has below the resistance line a broadening
and in the broadening a bottom part (9), whereby bottom part (9) is furnished with blast
holes (7, 8).
2. A convection heating furnace according to claim 1 **characterized** in that bottom part
15 (9) of the broadening is of thin plate and, due to strong convection blast and/or the
surface quality chosen for the plate, it is arranged to transmit substantially little thermal
radiation to the glass.
3. A convection heating furnace according to claim 1 **characterized** in that air blast
20 holes (7, 8) of bottom part (9) are holes with collars made in the thin plate.
4. A convection heating furnace according to claim 1 **characterized** in that heating
resistances (5) are placed in strong air flow in order to restrict their surface heat to
300°C higher than the temperature of air, which has passed the said resistance.
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5. A convection heating furnace according to claim 1 **characterized** in that heating
resistances (5) are placed in strong air flow in order to restrict their surface heat to
200°C higher than the temperature of air, which has passed the said resistance.
- 30 6. A convection heating furnace according to claim 1 **characterized** in that the bottom
part (9) temperature is substantially the same as the temperature of blast air on glass
sheet (1).

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7. A convection heating furnace according to claim 1 **characterized** in that the air speed inside channel part (2) is arranged to be at its highest at heating resistance (5) in forming in the said spot the most narrow place for the air flow in channel (2).

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8. A convection heating furnace according to claim 1 **characterized** in that heating resistance (5) is located in channel (2) in the direction of channel (2).

9. A convection heating furnace according to claim 1 **characterized** in that in that heating resistance (5) is located crosswise with respect to channel (2) and led to travel through it

10. A convection heating furnace according to claim 1 **characterized** in that for adjustment of the distribution of temperature and rising speed of temperature of glass (1) the powers of heating resistances (5) can by means of the furnace arrangements be adjusted separately and also the rotation speed of the blast apparatus maintaining the flow of blast air can be adjusted.

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